SECIFICATIONS

Covering

PLUMBING, WATER SUPPLY, ELECTRIC LIGHTING,
SPECIAL PLUGS, SWITCH GEAR EQUIPMENTS,
TELEPHONE SYSTEM & EXTERIOR WIRING INSTALLATIONS

For

New Office Building

STATINTL

[redacted]

SPECIFICATIONS

for

PLUMBING and ELECTRICAL INSTALLATIONS.

General Remarks. STATINTL

1. Scope of Work.

The work included under this contract shall comprise the furnishing of all materials and labor of every description hereinafter specified or shown on the drawings in connection with installations of the above mentioned systems for the New Buildings at [redacted]

Anything mentioned in this specification and not shown on the drawings or vice versa, or anything requisite to make complete working systems has to be included by this Contractor.

2. Labor and Materials.

The entire installations shall be strictly in accordance with this specification. All workmanship and materials required for the performance of this work shall be of the very best quality of the character of the kind specified. Where materials are not specified they shall be of the best grade of their kind.

No deviations from drawings or specifications will be allowed unless upon written consent of the Owner or his representative. The Contractor shall at his own expense to remove all materials or workmanship which has been condemned by the Owner.

3. Co-operation.

The Contractor must do his work in close co-operation with other contractor of this particular installation and must not hinder the satisfactory progress of building construction. It must be approved by the Owner if any cutting is necessary, this contractor shall reserve pipe chases and must be responsible for making good all work cut due to his tardiness in installing his pipe work.

4. Rules and Regulations. STATINTL

All work under this specification shall fully comply with the rules and regulations of the [redacted], at date of

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begining of contract. It shall also conform with the best American Standard Practices. The Contractor has to apply for the supply of water and electricity but all charges made by [redacted] for connections to mains and all other legal fees will be paid by the Owner.

5. Protection of Works.

The contractor should take care of all his own materials during the construction period and should be also responsible for any loss on the completed construction before it will be examined.

6. Guarantee.

Upon completion of the complete installation the Contractor shall submit a written guarantee to the Owner, to guarantee his system for one year. Any defects due to improper workmanship or inferior materials shall be replaced at Contractor's expense.

PLUMBING SYSTEM

1. Layout.

The water comes from the water tank which is built up with six pieces of petroleum drums aside the original one. Two water tank are connected each other with pipes, soonly the existing pump is enough. The water flows to the cold water system in New Office Building with 1½" galv. iron pipe connected directly to new water tank.

2. Water Tank.

Six (6) pieces 53 gallon petrol drums to be sitted on wooden frame works of 12 feet height with concrete foundation.

3. Storage Tank.

500 gallon capacity shall be constructed under the outdoor ground, 10" brick walls and cement finish on both sides with 1:3:6 concrete foundation. One manhole of 18" diameter shall be provided on the R.C. cover. 2-inch diameter galv. pipe shall be used to make the connection between this tank to the original tank aside.

4. Septic Tank.

The location and detial in construction as on drawing, length 15'-0"x width 8'-0"x depth 5'-0". Septic tank should be 10" thick pavement with brick and cement. All covers should be 1:2:4 reinforced concrete with cast iron manholes. The accessories for septic tank as pebbles, and and bleaching powed shall be provided by Contractor, and overflow shall be 6 inch in diameter cement pipe connecting to the nearby sewer.

5. Manhloe.

All manhloe are of 24 in. in square and shall be built up with 10" thick pavement of brick and cment mortar and completed with R.C. covers. The inner side with bottom of each manhole should be cement finsh.

6. Cold Water Supply Piping.

All pipes for cold water supply should be genuine galvanized iron pipe with same fittings of U.S.A. or Japanese make. The layout of these systems and the size of pipes must be according to the drawing. Pipe fittings must be used wherever pipe connection or turning is needed, it is not allowed to bend pipe as needed to charge the direction of pipe line.

7. Waste Line.

Waste line shall be wrought iron pipe with wrought iron fittings. Each fixture must be trapped, when there are two or more outlets on a vertical waste pipe, the lower fixture should be protected against siphonage or air binding by venting. Cleanouts must be provided in case of waste line clogged.

8. Soil Line.

All soil and vent pipe shall be heavy cast iron pipe of uniform thickness and cast iron fittings. They shall free from cracks, sand holes, and other defects. All joints must be fully calked with oakum and pigiead. Vent pipe should be extended above the roof and top of which should be installed with wire ball.

9. Plumbing Fixtures.

7	pcs.	Low tank water closet complete with fittings, seat and cover, of Japanese make.
4	"	16"x 22" Wall hung lavatory with chromium plated faucets, waste and trap, same as above.
5	"	Wall hung urinal with trap and flush valve.
3	"	24"x 36" White cement terrazzo sink with c.p. faucets, waste and trap.
1	"	20"x 20" White cement terrazzo slop sink with c.p. faucets, waste and trap.
4	"	2" C.p. floor drain with strainer.

10. Hydraulic Test.

A pressure test should be taken place after all water pipes are installed. It is required to reach this level that pressure will be 100 lbs. per square inch, and no leaking within one hour.

ELECTRICAL INSTALLATION.

1. General Description.

The wiring system is comprising of lighting, lamp fixtures, and special plugs. All wiring are to be installed with conduit in concealed type. The capacity of loads and the size of main feeders are prescribed as follows:

(1) Lighting and plugs, 110V 250A — 37/16.
(2) Special plugs, 110V 200A — 37/16.
(3) Special plugs, 110V 500A — 37/14.

The above service feeders shall be British make, CMA insulated wire installated from each main distribution panel inside the building to 5 feet outside the wall.

2. Lighting Main & Sub-ditribution Panel.

Lighting distribution panels shall be installed according to the drawings and wiring diagram for laying out branch circuits will be submitted later. All D.P bakelite covered knife switches with fuse shall be used. Fuses for lighting and special plug circuits are to be 15 and 30 amperes capacity respectively. The panel box is made hard wood, equipped with hinged door thereupon, and inside to be covered with galv. iron sheet and enameled twice. The appearance of it must be polished.

3. Electrical Conduit.

All Japanese made galvanized conduit of gauge 16 shall be used excepting the galv. iron pipe for main line and underground use ones. The outside diameter of the conduits shall not be less than 3/4 inch, and be smooth in suface of their inside wall. They shall be buried into the wall at the depth of 5/8" and well arranged to protect from the soaking of the water. The joint boxes which will be fastened by the nuts and bushings shall be installed at all joined places of the conduits.

The following standard of the numbers of the wire for various conduits should be observed by the contractor.

Not more than 3 wires of 1/16 shall be wired throug the conduits of 3/4 inch diameter.

Not more than 6 wires of 1/16, 4 wires of 7/20, or 3 wires of 7/16 shall be wires through the conduits of 1" diameter.

Not more than 10 wires of 1/16, 5 wires of 7/20, 4 wires of 7/18 or 3 wires of 7/16 shall be wired throug the conduits of 1¼ inch diameter.

Not more than 8 wires of 7/20, 6 wires of 7/18, 4 wires of 7/16, or 3 wires of 19/18 shall be wired through th conduits of 1½" diameter.

Not more than 4 wires of 19/16 or 3 wires of 19/14 shall be wired through the conduits of 2 inch diameter.

Not more than 4 wires of 37/14 shall be wired through the conduits of 3 inch diameter.

4. Conductors.

All British made C.M.A. wire of 600 megohm and 250 volts grade. No wire of saller size than 1/16 and 7/16 should be used on the lighting and plug circuits and special plug circuits respectively.

Lighting and special plugs should be installed on their own individual circuits seperately. Not more than 8 lamps or 8 plugs, or 2 special plugs should be installed on each circuit.

5. Outlet Box.

Galvanized iron boxes shall be installed at where all lamps, tumbler switches, plugs, and special plugs locate. Tumbler switches and knife switches for special plugs shall be installed on the wall at 4 feet height from the floor and the lighting and special plugs all on the base board.

6. Switches and Plugs.

Tumbler switches and plugs of Japanese made or flush type, 250 volts, 5 ampere ones, equipped with bakelite covers shall be used. Special plugs same with lighting plugs except 15 amp. capacity, and D.P. bakelite covered knife switch of 20 ampere should be installed with each plug.

7. Lighting Fixtures.

Fluorescent lamp tubes shall be U.S. made daylight, 48" ones and be furnshed with U.S. made accessories and ballast.
(All pendant reflectors and fluorescent lamps are to be supplied by the Owner.)
The ceiling lamps and round globes of 10"- 8" dia. shall be used in compliance with drawing at toilet, corridors and etc., lamp bulbs shall Phillips mark.

8. Grounding.

All conduits should be installed as one group and whichever panel box of any branch circuit should be well grounded by means of #12 insulated wire and earthing clamp.

ADDITIONAL INSTALLATION IN TRANSFORMER ROOM

The additional installation is of three sets of low-tension switch board, one for lighting and plugs, and the other two for special plugs.

The instrument and apparatus of switchboard such as oil circuit breaker, ammeter, disconnecting switches, signal lamps etc. are to be installed in the same design and workmanship.

The transformers are to be installed by contractor and to be supplied by owner.

The contractor should make the procedure of application of electricity to local power company and the charges collected by [redacted] should be paid by owner.

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TELEPHONE WIRING

1. Conduits.

All Japanese made, gauge # 16 galvanized and varnished conduit of not less than 3/4 inch shall be used. Not more than 2 telephones must be connected for those pipes of 3/4" diameter, 4 for those to 1" diameter so that more telephones might be connected there after in addition when necessary.

2. Conductors.

All CMA, 1/044 , 600 megohm, 250 volts grade of British made insulated wire shall be used from terminal block to telephone receptacles.

3. Junction Box.

The terminal block shall be made of hardwood, Wooden door and polished shall be equipped on the box, inside of the box shall be litharged once and enamel painted twice.

4. Telephone Receptacles.

All " T " flush type receptacles shall be used, with bakelite cover attached.

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5. All installation shall be according to these rule[redacted]